

**FLUKE®**

# Fluke 88 Series V Deluxe Automotive Multimeter

## Technical Data

The Fluke 88V has improved measurement functions, trouble-shooting features and accuracy to solve more problems on conventional and hybrid vehicles. The 88V is the most powerful automotive multimeter ever offered by Fluke. In addition to having all standard multimeter features like the ability to measure voltage, current, continuity, and resistance, the 88V can perform diode test and pulse width measurements.

This meter can take current measurements up to 20 A for 30 seconds and 10 A continuously. The optional magnetic hanger lets you attach the meter to most steel surfaces for easy set-up and viewing. The 88V is designed to be used in high energy environments like those found on hybrid vehicles.



### Features

- 0.1 % dc accuracy
- 4-1/2 digit mode for precise measurements (20,000 counts)
- Measure up to 1000 V ac and dc
- Current measurements up to 10 A, 20 A for up to 30 seconds
- Built-in thermometer for temperature measurements when you need them (temperature probe included)
- Resistance, continuity and diode test
- RPM measurements with inductive pickup (included)
- Millisecond pulse width measurements for fuel injectors
- Magnetic hanger to attach meter to the vehicle and free your hands for other tasks
- Min/Max/Average recording with Min/Max Alert to capture variations automatically
- Peak Min/Max to record transients as fast as 250  $\mu$ s
- Relative mode to remove test lead resistance from low ohms measurements
- Auto and manual ranging for maximum flexibility
- Autohold™ to capture stable readings with only one touch of the leads
- Large display digits and two-level bright white backlight for increased visibility
- Analog bargraph to track changing or unstable signals
- Input Alert provides audible warning against wrong use of input jacks
- Access door for fast battery changes without opening up the case
- "Classic" design that fits your hand with new removable holster, built-in test lead and probe storage
- 10 meg ohm input impedance won't damage computer circuits
- Limited lifetime warranty on meter



## Specifications

Technical Specifications	
DCV	Maximum Voltage: 1000 V Accuracy: Fluke 88 V: $\pm (0.1 \% + 1)$ Best Resolution: Fluke 88 V: 0.01 mV
ACV	Maximum Voltage: 1000 V Accuracy: Fluke 88 V: $\pm (0.5 \% + 2)$ AC Bandwidth: Fluke 88 V: 5 kHz Best Resolution: 0.01 mV
DC Current	Maximum Amps: 10 A Amps Accuracy: Fluke 88 V: $\pm (0.4 \% + 2)$ Best Resolution: Fluke 88 V: 0.001 mA
AC Current	Maximum Amps: 10 A Amps Accuracy: Fluke 88 V: $\pm (1.2 \% + 2)$ Best Resolution: 0.001 mA
Resistance	Maximum Resistance: 50 M $\Omega$ Accuracy: Fluke 88 V: $\pm (0.4 \% + 1)$ Best Resolution: 0.1 $\Omega$
Capacitance	Maximum Capacitance: 9,999 $\mu$ F Accuracy: $\pm (1 \% + 2)$ Best Resolution: 0.01 nF
Frequency	Maximum Frequency: 200 KHz Accuracy: $\pm (0.005 \% + 1)$ Best Resolution: 0.01 Hz
Duty Cycle	Maximum Duty Cycle: 99.9 % Accuracy: within 2 % per KHz + 0.1 % Best Resolution: 0.1 %
Temperature Measurement	-200.0 °C to 1090 °C (-328.0 °F to 1994.0 °F), 1.0 % excluding probe
80BK Temperature Probe	-40 °C to 260 °C (-40 °F to 500 °F), 2.2 °C or 2 % whichever is greater
Conductance	Maximum Conductance: 60.00 nS Accuracy: $\pm (1.0 \% + 10)$ Maximum Resolution: 0.01 nS
Operating Range	Operating Temperature: -20 °C to 55 °C Storage Temperature: -40 °C to 60 °C
Physical	5.2 cm x 9.8 cm x 20.1 cm (2.06 in x 3.86 in x 7.93 in) 624 g (22 oz.)

**Step up to a complete automotive diagnostic package with the 88V/A Automotive Combo Kit. It offers virtually everything you need in an automotive multimeter.**



### Combo Kit Includes:

- 88V Automotive Multimeter
- TL224 1.5 m long heat resistant silicone test leads
- TP220 removeable test probes to correctly measure corroded terminals
- AC285 Alligator Clips
- TPAK Magnetic Hanger to position and hold meter to steel surfaces
- 80BK Temperature Probe
- RPM80 Inductive Pick-Up Probe
- Two Automotive Back Probe Pins
- Insulation Piercing Probe
- Durable Carrying Case

## Optional accessories

Model	Description	
TLK281	SureGrip™ Automotive Test Lead Kit	Complete set of test and measurement accessories designed especially for automotive specialists.
TLK282	SureGrip™ Deluxe Automotive Test Lead Kit	Everything you can find in the TLK281 Automotive Test Lead Kit, plus a few extras.
TP81 and TP82	Insulation Piercing Probes	Set of stainless steel probe pierces insulation on 14, 16 and 18 gauge wire. Essential for use under hood or under dash. Use it on fuel injectors or sensors while providing complete insulation to grounding due to design.
TP40	Automotive Back Probe Pins	Set of five flexible and formable 1-1/4 inch pin provides an easy connection past weather pack seals to connector conductors. A must-have for fuel injectors, TPS and MAP sensors, as well as for any underhood or under vehicle connector with weather pack seals.
TP88	Rigid Back Probe Pins	Set of one red and one black two inch long rigid back probe pins easily pass between the weather pack seal and wire. A sharp point ensures good contact to the electrical connector, and the pin's insulation protects it from shorting to other wires.
TP84	Oxygen Sensor Insulation Piercing Probes	12 inch long piercing probe extends your reach into a hot engine. Foot-long probe keeps your hands away from the exhaust manifold.
PV350	Pressure Vacuum Transducer	Use your general purpose meter to read compression, static or running, as well as air pressure, engine vacuum, transmission pressures as well as fuel pressure.

**Fluke.** *Keeping your world up and running.*

## Ordering information

Fluke-88V Automotive Meter